

EdgeEV100™

Specifications and Ordering Information



Single-Phase AC Power Source for Three-Phase Input for
Direct Current Fast Chargers (DCFC)

General Specifications

Utility Service Configuration

Service Type	Single-Phase
Service Voltage (required)	480 Vac
Service Wiring (required)	2-Wire (L1, L2, G)
Service Voltage (optional)	240/480 Vac
Service Wiring (required)	3-Wire (L1, L2, N, G)
Service Transformation (minimum)	125 kVA

Electrical Input

Connection Type	Single-Phase
Input Wiring Connections	L1, L2, N, G
Voltage	480 Vac
Voltage Tolerance	440-520 Vac
Frequency (standard)	60 Hz
Full-Load Input Current	265 A
Power Factor	0.98
Over-Current Protection	300 A
Power Disconnect	Yes

Efficiency and Power Quality Characteristics

Full Load Efficiency	98.7%
Standby Power Consumption	300 W
Full Load Input Voltage Distortion (V_{THD})	Typically < 3%
Full Load Input Current Distortion (I_{THD})	Typically < 10%
Input Surge Protection (standard)	Class I + II (IEC 61643-11)
Input Short Circuit Rating (standard)	35 kA

Electrical Output

Connection Type	Three-Phase
Connection Configuration (standard)	Delta
Wiring Connections (standard)	L1, L2, L3, G
Connection Configuration (optional)	Wye
Wiring Connections (optional)	L1, L2, L3, N, G
Voltage (L-L)	480 Vac
Voltage Balance	< 2%
Full-Load Output Current	142 A
Over-Current Protection	200 A
Power Disconnect	Yes

Enclosure & Environmental

Operating Temperature (standard)	-10 C (14 F) to 50 C (122 F)
Cold Weather Operating Temperature (optional)	-40 C (-40 F) to 50 C (122 F)
Storage Temperature	-40 C (-40 F) to 60 C (140 F)
Cooling Apparatus	Active Fan
Operating Altitude (without derating)	200 m (6600 ft)
Ambient Humidity	< 95% RH (non-condensing)
Sound Level	< 70 dB
Enclosure Rating	NEMA 3R, NEMA 12, IP 55/IP65
Enclosure Dimensions (width x depth x height)	916 mm x 611 mm x 1830 mm
Enclosure Dimensions (width x depth x height)	36.06 in x 24.06 in x 72.06 in
Unit Weight	450 kg (990 lbs)
Human Interface	7-Inch Touchscreen

Electrical Terminal Configuration

Terminal Configuration	Enclosed
Terminal Openings	Single (1) or Parallel (2)
Conductor Size (min to max)	6 AWG to 500 kCM
Fastening Method	Mechanical Hex Screw

Copper Conductor Recommendations

	Single	Parallel
Minimum Recommended Input Conductor (Cu)	400 kCM	2/0
Max Distance from Input Power Source (Cu)	846 ft	562 ft
Minimum Recommended Output Conductor (Cu)	3/0	1/0
Max Distance from DCFC Station (Cu)	662 ft	831 ft

Dependent on project design requirements

Aluminum Conductor Recommendations

	Single	Parallel
Minimum Recommended Input Conductor (Al)	600 kCM	4/0
Max Distance from Input Power Source (Al)	770 ft	543 ft
Minimum Recommended Output Conductor (Al)	4/0	1/0
Max Distance from DCFC Station (Al)	507 ft	505 ft

Dependent on project design requirements

Connectivity

Service and Maintenance	Remote Monitoring
Application Interface	Cloud-Based Dashboard
Wide Area Cellular Network (standard)	4G, 5G
Local Area Network (standard)	Ethernet (RG45/RJ45)
Local Area Network (optional)	2.4 GHz / 5 GHz Wi-Fi

General Information

EdgeEV100™ Datasheet

Safety General	Emergency Stop
	Input/Output Disconnect
	Over-Voltage
	Under-Voltage
	Over-Current
	Over-Temperature
Monitoring Capabilities	Temperature
	Input Power
	Output Power
	Status
Regulatory Compliance	UL 508A
Standard Warranty	Standard 1-Year
Warranty Extensions	+2 Yr / +4 Yr



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